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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,777	07/07/2003	Jun Ozawa	285032005901	8016

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David L. Fehrman
Morrison & Foerster LLP
35th Floor
555 W. 5th Street
Los Angeles, CA 90013

EXAMINER

KEENAN, JAMES W

ART UNIT	PAPER NUMBER
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3652

DATE MAILED: 07/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/614,777

Applicant(s)

OZAWA ET AL.

Examiner

James Keenan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 32-66 is/are pending in the application.
- 4a) Of the above claim(s) 43-46, 48, 49, 54-58 and 63-65 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 32, 33, 35-39 and 52 is/are allowed.
- 6) ☒ Claim(s) 34, 40-42, 47, 50, 51, 53, 59-62 and 66 is/are rejected.
- 7) ☒ Claim(s) 35, 36 and 40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/5/05</u> | 6) <input type="checkbox"/> Other: _____ |

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1. Claims 43-46, 48, 49, 54-58, and 63-65 remain withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
2. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).
3. Claims 35, 36, and 40 are objected to because of the following informalities:

in claim 35, last line, --the-- should be inserted before "auxiliary";

in claim 36, penultimate line, --the-- should be inserted before "load";

in claim 40, line 12, --the-- should be inserted before "common".

Appropriate correction is required.
4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claims 34, 40-42, 47, 50, 53, and 60-61 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 34, there is no clear antecedent basis for "the transfer section". This also applies to claims 47, 50, 53, and 60 (line 7; "transfer chamber"). Re applicant's comments, while there may be broad antecedent basis for a transfer section/chamber, the examiner's point is that each of a plurality of process units includes this feature. Thus, the recitation of a singular section/chamber is indefinite because it is not clear if it refers to a specific one of the sections/chambers, and if so, which one.

In claim 40, second line, "its elongated line" is not understood.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claim 62 is rejected under 35 U.S.C. 102(b) as being anticipated by Nakane et al (US 4,483,651), previously of record.

Nakane et al show a vacuum processing system including load ports 5, 5' in which plural cassette containers each holding a plurality of objects are arranged in a first line, common transfer chamber 10 having first transfer device 4, and a plurality of process units linearly extended from the common transfer chamber along second and

third lines at right angles to the first line, each including a process section 2, 2', 2" and a second transfer device 11, 11', 11" for linearly transferring objects to and from the process section. Nothing precludes the first and second transfer sections from being disposed within the common transfer section.

Re applicant's comments, the assertion that cassette 5' is for post-process wafers rather than "objects to be processed" is immaterial. First of all, functional limitations do not have to be explicitly met by a 35 USC 102 reference which meets all structural limitations, as long as it is capable of performing such functions. Furthermore, even though the wafers are sent to cassette 5' after processing in the chambers, this does not mean that they are finished processing. Clearly, the wafers will be further processed somewhere else, and thus they are still "objects to be processed".

8. Claims 51, 59, and 62 are rejected under 35 U.S.C. 102(e) as being anticipated by Muka (US 6,079,927), previously of record.

Muka shows in figures 2-4 a vacuum processing system comprising load port 124 on which a plurality of cassette containers 130 holding a plurality of objects 136 to be processed are arranged in first direction, common transfer chamber 258 having opposite first and second sides, the load port being arranged on the first side, plural process units provided on the second side of the transfer chamber along the first direction, each process unit including a process section 120 and a transfer chamber 262, the process units extending linearly from the common transfer chamber in a second direction perpendicular to the first direction, first transfer device 190 in the

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common transfer chamber to transfer objects between the load port and the transfer chamber, and second transfer devices 230, 232 in the chamber 262 to transfer objects to and from the process sections, inherently without rotation of the object, based on its well known structure shown in figure 3, wherein the transfer chamber is independent from the common transfer chamber via the unlabeled gates shown in figure 4.

Re claim 59, ports 222, 224 are considered to be "gate valves".

Re applicants comments concerning the limitation "without rotation of the object" in claim 51, the absence of a negative limitation in a reference does not mean that it possesses the opposite limitation. That would be analogous to asserting that the lack of a statement indicating that an object is not a certain color is tantamount to it being that color. Muka certainly does not disclose that it does rotate the object; in fact, the robot arms 230, 232 appear to have the same structure of applicant's arms 202, which, as noted above, is inherently capable of transfer without rotation.

As for applicant's comments that Muka fails to show individual process units because the robots 230, 232 are in the same chamber, these arguments are simply beyond the scope of the claims. Nowhere in the claims is the term unit defined in a manner which precludes the structure of Muka from meeting the limitations.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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10. Claim 66 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muka.

Although Muka does not show each of the transfer sections to be changeable between vacuum and atmosphere states, the transfer section as a whole is considered to be capable of evacuation, inasmuch as it is disclosed as being maintained at a class .1 contamination level (col. 8, lines 3-5). By extension, it is therefore considered to be "changeable between a vacuum state and an atmosphere state".

It thus would have been a mere design expediency to have provided separate transfer sections individually capable of changing between vacuum and atmospheric states, as this would improve throughput by allowing the transfer sections to be individually pressurized to suit optimal processing conditions.

11. Claims 32, 33, 35-39, and 52 are allowed.

12. Claims 34, 40-42, 47, 50, 53, 60, and 61 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

13. Applicant's arguments filed 5/5/05 have been fully considered but they are not persuasive. All pertinent arguments have been addressed above.

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Keenan whose telephone number is 571-272-6925. The examiner can normally be reached on (schedule varies).

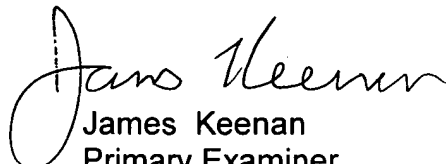
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eillen Lillis can be reached on 571-272-6928. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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James Keenan
Primary Examiner
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jwk
7/14/05